

Poultry Diseases and Sanitation

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There are two general conditions which cause the loss of a great many chickens. They are:

- 1.—Contagious diseases, which are caused by organisms.
- 2.—Parasites, both internal and external.

In dealing with all poultry diseases it is well to remember the old saying "An ounce of prevention is worth a pound of cure."



Ruffled feathers, drooping wings, and listlessness are characteristic of roup and chicken pox. Note the swelling on the eye and face.

It is the aim of the writer to deal with preventive measures, also the remedies to be applied to some of the common diseases of chickens, and methods of combating parasites which affect poultry.

PREVENTION

- 1.—Be sure that the breeding stock is healthy; the first requirement for successful poultry raising is vigorous, healthy birds.
- 2.—Fresh ground, free from contamination, should be provided. This can be done by moving the poultry houses, or by cultivating the ground around the house and planting it to corn, or sowing some grain such as wheat or rye.
- 3.—Remove droppings frequently, preferably daily, and the litter as it becomes fine. Clean and disinfect the house at least twice a year. All portable fixtures should be removed and the floor swept clean. The interior of the house and fixtures should then be sprayed with some good coal tar disinfectant.
- 4.—The house should be well ventilated by means of openings in the front.

Muslin curtains should never be used except as a means of keeping out snow or rain. The muslin should in no case be left on the window thru the summer.

During the spring and summer a door or window above the roosts should be opened on the north to provide circulation of air. A 12-inch opening the entire length of the house just below the plate on the north is the common means of providing plenty of air.

Sunlight is the best and cheapest disinfectant; get as much of it in the house as possible. There should be a large window on both the east and the west, as well as plenty of glass in the south, and these should all be removed during the warm weather.

5.—Select clean feeds and do not overfeed of any one grain. Ohio farmers feed too much corn. It is just as harmful to have hens too fat as to have them too poor. Feed a dry mash containing animal food in open hoppers so as to make the hens lay. A laying hen will be healthier than a loafer.

6.—Provide a deep, clean litter for the hens and make them scratch for all grain.

7.—Do not turn the hens out during winter weather. Especially avoid letting them out in the middle of the winter or warm days when there is melting snow on the ground. The hens will be healthy and happy in the house from Thanksgiving until March.

8.—Do not scatter droppings and other cleanings from the house on the poultry yards. They should be hauled as far away from the hen house as possible. All dead birds should be burned.

ROUP

Roup is generally recognized as showing three distinct symptoms, and is often called by three different names depending upon the symptoms. They are:

- 1.—Wet roup.
- 2.—Chicken pox.
- 3.—Fowl diphtheria.

Wet roup is characterized by the watery swelling about the eyes. The nose may become stopped up and breathing made difficult, and there is generally an offensive odor.

Chicken pox can be identified by small nodules on the comb and face.

Diphtheritic roup is identified by the dry, cheesy growth in the mouth and throat.

Control of Roup—

1.—Roup can be prevented by keeping the house dry and free from drafts; plenty of fresh air should be provided at all times. Do not allow birds to wade in snow and water during the winter months.

2.—Segregate all affected birds as soon as the disease is noticed and prevent the spread of the disease by sanitary precautions.

3.—The fowls may be vaccinated with roup bacterin. This is claimed to prevent the spread of the disease to other fowls that have not already contracted it.

Treatment—

1.—All affected birds should be placed in a house that can be well ventilated. Give them plenty of fresh air, but do not permit a draft to pass directly over them. An abundance of fresh air will prevent the contagion from passing from one fowl to another.

2.—If it is decided to vaccinate all the fowls with roup bacterin, this may be done by means of a hypodermic needle, which injects the material beneath

the skin at the shoulder. This material is claimed to immunize the birds so that they will not contract the disease and also tends to have a beneficial effect upon those that have already contracted it.

3.—Give them water to drink in which has been dissolved epsom salts at the rate of 1 pound to 4 gallons of water. Repeat this every third day.

4.—Paint the affected area of the head with tincture of iodine, or dip the head in a solution of potassium permanganate, which is made by dissolving 1 teaspoon of potassium permanganate in 1 gallon of water.

5.—Feed lightly for a few days, giving only grain. As soon as the disease has been arrested the hens should be put on their regular laying feed.

TUBERCULOSIS

Tuberculosis is becoming prevalent in Ohio. This disease is caused by a disease germ that is hard to detect. In most instances it has become thoroly established in the flock before the farmer is aware of its presence.

Symptoms—The symptoms, which appear only after the disease is well established, are, lameness, emaciation, ruffled feathers, and bluish comb.

Post-mortem examination shows yellowish or white nodules on the liver, spleen and intestines (see illustration.) These nodules are cheesy in consistency and may be sunken into the flesh or swollen out. The lungs are not affected in fowls as in human tuberculosis.

Treatment—There is no known cure for the disease. If the flock is not a particularly valuable one the best method is to dispose of the entire flock, thoroly disinfect, allow the buildings and land to lie idle for a year and then start over. All dead birds should be burned and all cleanings from the premises hauled away.

If the flock is too large and valuable to dispose of, the affected birds should be killed and the healthy looking, vigorous birds should be given a dry, clean, well ventilated house. The house should be thoroly sprayed with a good coal tar disinfectant or painted with carbol. The ground should be plowed and planted to corn, wheat, or rye.

Feed the birds a ration not too heavy in animal food. Milk given as the only drink will keep the birds laxative and at the same time supply animal food.

FATTY DEGENERATION

Many hens die in the spring after being confined all winter to the house, where by overfeeding on corn and by lack of exercise they have become over-fat. The hens usually show every appearance of health. Death occurs often on the nests or even in the yards. Post-mortem examinations show a large amount of fat surrounding the heart and the digestive organs. Death is caused by heart failure or by apoplexy.

Treatment.—The only treatment is to prevent the birds from getting too fat.

Feed the birds a dry mash containing 20 percent of meat scraps or give them nothing to drink but milk. This will prevent the hens from getting too fat, for heavy egg production is sure to result. It is almost impossible to fatten a laying hen. Feed all scratch feed in a deep litter of straw and make them exercise by scratching.

INTERNAL PARASITES

Internal parasites are particularly harmful to growing chicks and may be the cause of loss in grown birds. The parasites spread from one fowl to another thru ground worms, and the best treatment is to move the chick yard,

if possible. If this is not done the yards should be plowed and planted to some cultivated crop or forage crop.

Symptoms—The affected birds are thin and emaciated, have a pale color in the face with a purple or bluish comb. The feathers may become ruffled and especially in growing chicks slow growth and development are obvious.

Treatment—

1.—Move young chicks to fresh ground.

2.—“For 100 fowls take 1 pound finely chopped tobacco stems; steep these for two hours in enough water to keep them covered, mix this liquid, also the stems, with ground feed sufficient for one-half the usual feeding. Before this is fed the fowls should be prepared by reducing the feed of the previous evening to one-half the customary ration. On the day of the treatment no feed



The liver and spleen on the right are from a tubercular fowl. The presence of nodules or tubercles is evidence of tuberculosis. The light spots on the liver and spleen on the left are due to light reflection, they are not tubercles.

should be given until 2 p. m., when the medicated mash is fed, care being taken that each fowl gets its share. Two hours later about one-fourth the usual ration of ground feed mash, made with water in which epsom salts (1 pound per 100 fowls) has been dissolved. The same treatment should be repeated in seven days. Chicks may receive the same treatment, the normal ration of food for the different ages taking care of their proportion of tobacco.”

EXTERNAL PARASITES

Body Lice.—These pests are so common that every poultryman knows them without a description.

Treatment—

1.—Dip the birds in a solution of sodium fluoride, made by dissolving 1 pound in 10 gallons of water. This treatment should be given on a warm day.

2.—Apply blue ointment to the skin and feathers just below the vent.

Scaly Leg Mites.—Rub the legs with blue ointment that has been mixed with vaseline, half and half.

Red Mites—

1.—Spray the house with a heavy coal tar disinfectant.

2.—Paint the roosts and supports with a heavy oil such as crude petroleum.